

### 5.3 Stable Food Supply

Civilizations need a stable food supply. A complex society can thrive only if its members have the food they need to survive.

The Sumerians invented two key things to help them create a stable food supply. One of these inventions was their complex irrigation systems. The Sumerians built **networks** of canals, dams, and reservoirs to provide their crops with a regular supply of water.

Their second invention was the plow. A plow is a tool used for tilling, or turning, the soil to prepare it for planting. Before the plow was invented, farmers used animal horns or pointed sticks to poke holes in the earth. Then they would plant seeds in the holes. This was a very slow way to farm. Farmers needed a faster way to prepare the land for planting.

The Sumerians made the first plow out of wood. One end of the plow was bent for cutting into the ground to turn the soil. Farmers themselves pushed and pulled the plow along the ground, or they used animals such as oxen to pull it.

The Sumerians invented the plow. Today, some people in Iraq, the present-day location of Sumer, still use plows to farm the land.





This man and child are standing in the ruins of the ancient city of Uruk, located in present-day Iraq.

## 5.4 Social Structure

Civilizations have a complex organization, or social structure. A social structure includes different jobs and social levels. People at higher levels have greater status than others.

Archaeologists have found evidence that several classes of people lived in Sumer. At the top level were priests, landowners, and government officials. These people had the largest and most luxurious homes, near the center of the city. Their houses were two stories high. Evidence suggests that these mud houses had whitewashed walls.

At the middle level were **merchants** and **artisans**. Among the artisans were skilled metalworkers. They worked with such metals as gold, silver, tin, lead, copper, and bronze. Out of these materials, they made swords and arrowheads for the army. They made tools, like plows and hoes, for farmers. They also made **luxury** items, such as mirrors and jewelry, for the upper class.

The middle class also included farmers and fishers. They lived in small, mud-brick houses at the edge of the city. Farmers often worked to build or repair the irrigation systems. In times of war, they were forced to serve in the army.

At the bottom level of the social structure were slaves. They lived in their owners' homes and had no property of their own.

**merchant** a person who makes money by selling goods

**artisan** a craftsperson



## 5.5 Government

All civilizations have a system of government to direct people's behavior and make life orderly. Sumerian city-states were ruled by kings. The Sumerians believed that their gods chose these kings. This belief made kings very powerful. It also helped to reinforce the social order, because obeying the will of the gods was one of the Sumerians' strongest beliefs.

Sumerian kings enforced the laws and collected taxes. They built temples and made sure irrigation systems were maintained.

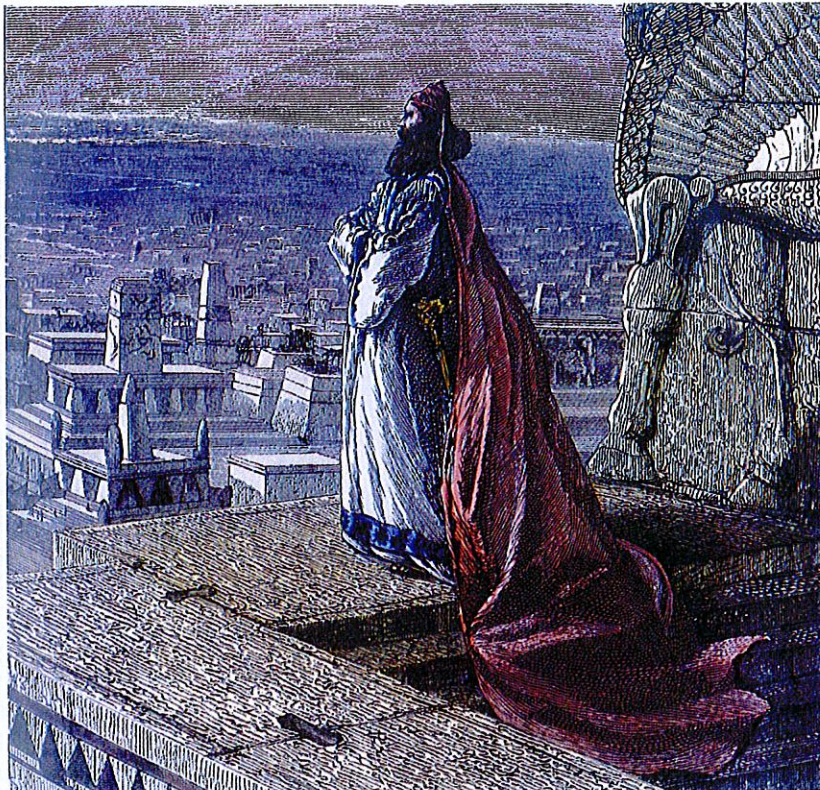
A king also led his city-state's army. All the city-states needed armies because of constant fighting over land boundaries and the use of water. Leading the army was one of the king's most important jobs.

A Sumerian army included both **professional** soldiers and temporary citizen-soldiers. Some were foot soldiers. Others drove chariots, which were wheeled vehicles pulled by horses.

Kings appointed officials to help with certain duties. Governors ruled the outlying towns. **Scribes** helped record laws. The Sumerians were the first people to develop a system of written laws.

One special group of officials patrolled the canals. They looked for damage and made sure that farmers did not take water illegally.

**scribe** a person who writes



From his palace walls, a Sumerian king looks out over the city-state he rules.



## 5.6 Religion

All civilizations have some kind of religious system. A religious system includes both a set of beliefs, usually in a god or gods, and forms of worship.

In Sumer, religious beliefs influenced every part of daily life. The Sumerians tried to please their gods in all things, from growing crops to settling disputes. Religion bound the people together in a common way of life.

The ancient Sumerians expressed their religious beliefs by constructing temples and religious towers called **ziggurats** (ZIHG-guh-rats). It was the king's duty to build and maintain these ziggurats. The towers were platforms made of mud bricks, with shrines on the highest tier. Ziggurats were so large that they could be seen from 20 miles away. Some were as high as 8 stories and as wide as 200 feet.

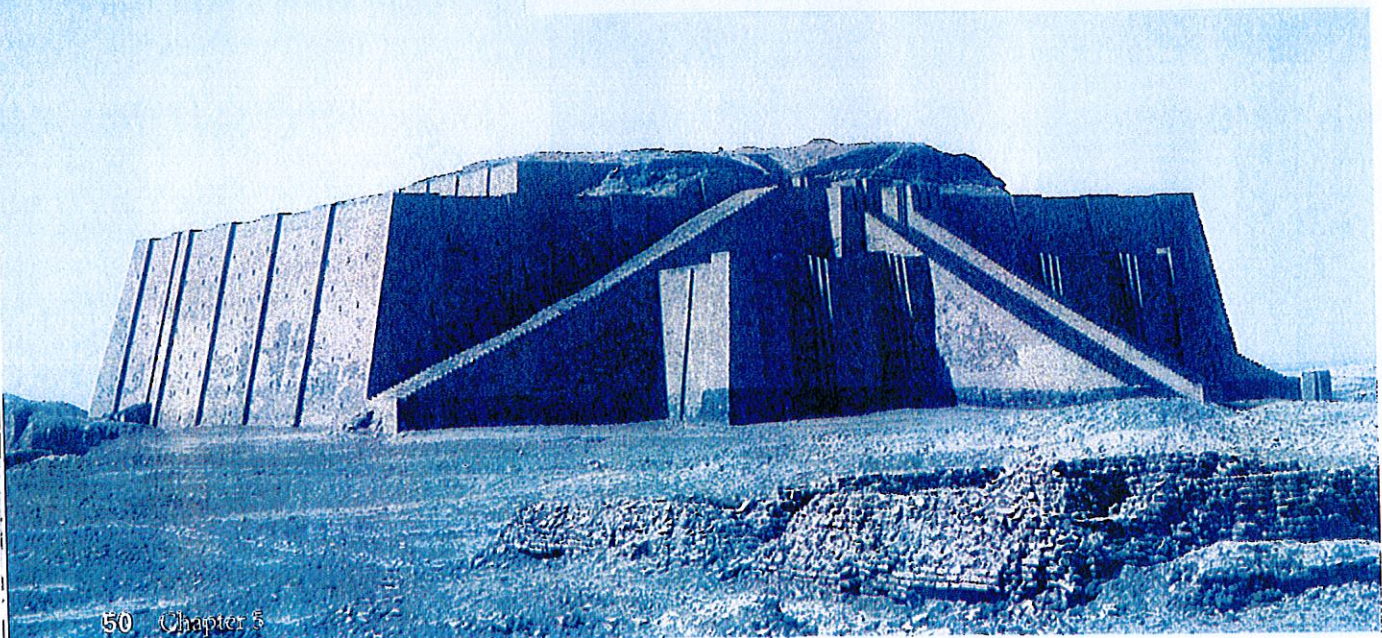
The Sumerians believed that their gods lived in the ziggurats, most likely in the special shrines at the top. Attached to the outside walls of each ziggurat was a long staircase that the gods could use to climb down to Earth. Kings and priests stood inside the towers to ask for the gods' blessings.

Sumerian statues also expressed religious beliefs. Many of these statues were detailed and lifelike. They showed people worshipping the gods, often with eyes gazing upward. The Sumerians believed that the gods were pleased when people showed these signs of devotion, or love and obedience.

The Sumerians had many kinds of religious ceremonies. Often, musicians played at these ceremonies. Some ceremonies may have involved human sacrifice, the ritual killing of a person as an offering to the gods.

**ziggurat** an ancient Mesopotamian temple tower with outside staircases and a shrine at the top

This is a reconstruction of the ziggurat that once rose over the ancient city of Ur.





## 5.7 The Arts

All civilizations have a highly developed **culture**, including the arts. Arts include creative forms of expression such as painting, architecture, and music.

There were many kinds of artists and artisans in ancient Sumer. Metalworkers made objects, like weapons and cups. They made decorative items, such as mirrors and jewelry, too. Architects designed temples and ziggurats.

Music was another important art in Sumer. The Sumerians believed that music brought joy to gods and people alike. Musicians sang and played instruments during temple ceremonies. They wrote love songs and entertained guests at feasts.

Sumerian musicians played a variety of instruments, including drums and pipes. One favorite was a small harp called a *lyre*. Lyres were wooden instruments made of a sound box and strings. A wooden bar held the strings in place at the top. Lyre makers often decorated their instruments with precious stones and with carvings made of horn. These decorations show how much the Sumerians valued music.

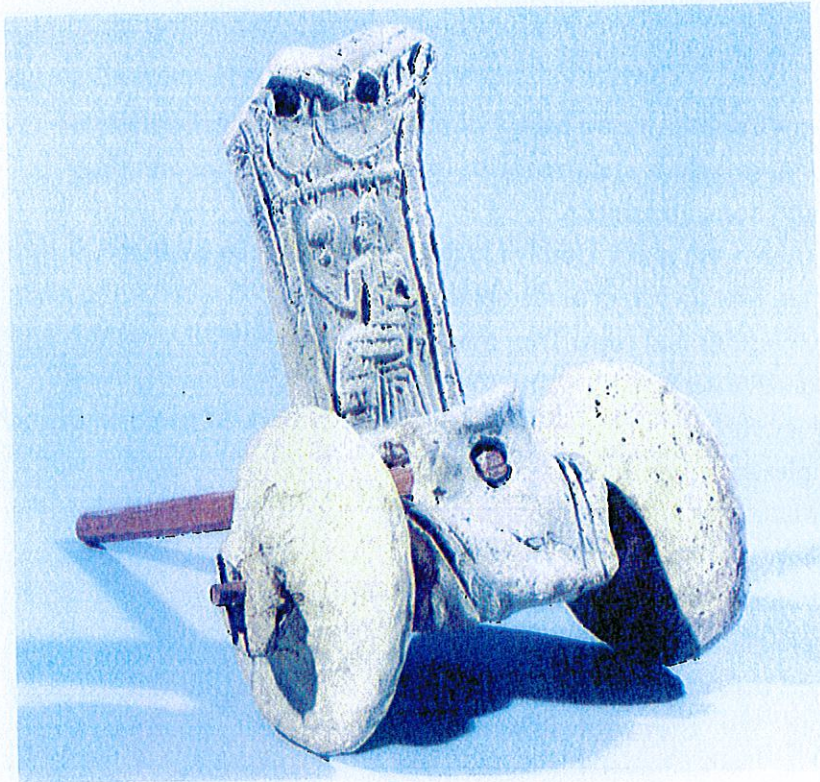
This fancy lyre has the head of a bull decorating its sound box. A musician would strum the strings to play musical notes.

**culture** a characteristic of civilization that includes the beliefs and behaviors of a society or a group of people





This is a model of a wheeled chariot used in the Sumerian army. Chariots were pulled by horses or donkeys while soldiers stood behind the shields.



## 5.8 Technology

All civilizations create new forms of technology. The Sumerians made several technological advances.

The most important Sumerian invention was the wheel. The earliest examples of the wheel date back to 3500 B.C.E. Sumerian potters, or pottery makers, first used wheels as a surface for shaping clay into pots. Potters' wheels spun, flat side up, on an axle. The Sumerians discovered that a wheel that was flipped onto its edge could be rolled forward. They used this discovery to create wheeled carts for farmers, and chariots for the army. They built the wheels by clamping pieces of wood together.

It would be hard to discover a more powerful invention than the wheel. Before the wheel, people had to drag their goods on flat-bottomed carts called *sledges*. The sledges often got stuck in mud, and they couldn't support heavy loads. Wheeled carts made it much easier to move goods over long distances. Oxen could pull three times more weight on wheeled carts than on sledges.

Another technological advance was the arch. Sumerian arches were inverted (upside-down) U- or V-shaped structures built above doorways. To build arches, the Sumerians stacked bricks, made of clay and straw, to rise from the walls in steps until they met in the center.



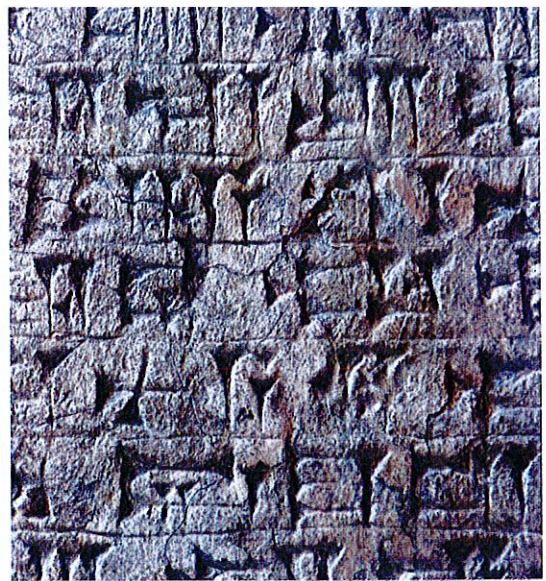
Arches added strength and beauty to Sumerian buildings. They became a common feature of temple entrances and upper-class homes. Some historians say that the arch is the Sumerians' greatest architectural achievement.

## 5.9 Writing

A final characteristic of civilizations is a highly developed written language. The Sumerians created a written language called **cuneiform**. This name comes from the Latin word for "wedge." The Sumerians used a wedge-shaped stylus (a sharp, pointed tool) to etch their writing in clay tablets.

Sumerians developed cuneiform around 2400 B.C.E. The earliest examples of cuneiform show that it was used to record information about the goods people exchanged with one another. At first, cuneiform writing may have contained as many as 2,000 symbols to stand for ideas and sounds. Over time, this number was reduced to about 700.

Cuneiform was based on an earlier, simpler form of writing that used **pictographs**. Pictographs are symbols that stand for real objects, such as a snake or water. Scribes used a sharpened reed to draw the symbols on wet clay. When the clay dried, the marks became a permanent record.



Shown here is cuneiform writing etched in a clay tablet.

**cuneiform** writing that uses wedge-shaped characters

**pictograph** a symbol that stands for an object

## Chapter Summary

**In this chapter, you have learned about the characteristics of Sumer society that made it a civilization.**

**Stable Food Supply** Ancient Sumerians invented an irrigation system and the plow to help them create a stable food supply.

**Social Structure, Government, and Religion** Ancient Sumer had a complex social structure with different jobs and social levels. The government was led by kings. Religious beliefs influenced every part of daily life.

**Arts, Technology, and Writing** Ancient Sumerians had a highly developed culture that included the creative arts of painting, architecture, and music. The Sumerians' most important technological invention was the wheel. They also created a written language called cuneiform that was based on pictographs.